

MATERIAL SAFETY DATA SHEET

According to EC directive 93/112/EC.

1. PRODUCT AND COMPANY IDENTIFICATION.

Trade Name: **Calcium Chloride Flakes 77-80%**

Manufacturer/Supplier: Central Chemical Supplies Limited
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2. COMPOSITION/INFORMATION ON INGREDIENTS.

Hazardous components

CAS no or Other code	Chemical name of the substance	Concentration	Hazard symbol, R phrases and other information
100043-52-4	Calcium chloride	77 – 80%	Xi, R36 EU no 2331408

Further information: White flakes.

3. HAZARD IDENTIFICATION.

Irritating to eyes.

4. FIRST AID MEASURES.

Additional advice

First aid -Inhalation: Move to fresh air.

First aid -Skin contact: Wash off with plenty of water.

First aid -Eye contact: Rinse immediately with plenty of water, also under the eye lids, for at least 15 minutes. Call a physician immediately.

First aid -Ingestion: Drink plenty of water. Induce vomiting immediately and call a physician. Never give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media:	Standard procedure for chemical fires.
Extinguishing media which must be used for safety reasons:	-----
Special exposure hazards in a fire:	Heating above the decomposition temperature will release toxic fumes (C1).
Special protective equipment for firefighters:	Wear self-contained breathing apparatus and splash protective suit.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Avoid contact with skin and eyes.
Environmental precautions:	No special environmental precautions required.
Methods for cleaning up:	Shovel or sweep up. Shovel into a suitable container for disposal. Avoid dust formation. Dispose of in compliance with local and national regulations.

7. HANDLING AND STORAGE

Handling:	Avoid contact with skin and eyes. Do not breathe dust. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment.
Storage:	Keep container tightly closed (hygroscopic). Incompatible products: $B_2O_3 + CaO$; BrF_3

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limit values:	Not available. For inorganic dust: HTP (8h) = 10 mg/m ³
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Exposure controls

Occupational exposure controls:	Avoid contact with skin and eyes. Avoid dust formation. Wash hands before breaks and immediately after handling the product.
Respiratory protection:	Half mask with a particle filter P2.
Hand protection:	PVC or other plastic material gloves. Do not use leather gloves.
Eye protection:	Goggles/face-shield
Skin and body protection:	Lightweight protective clothing/dust impervious protective suit. Rubber or plastic apron. Do not use leather clothing or shoes. Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White flakes.
Odour:	Odourless
Boiling point/range:	> 1600°C
Flash point:	N/A
Explosive properties:	
Lower explosion limit	N/A
Upper explosion limit	N/A
Vapour pressure:	Negligible
Relative density:	ca. 2.04Kg/dm ³ (77% CaCl ₂)
Bulk density:	n. 820Kg/m ³ (77% CaCl ₂)
Solubility in water:	745 g/l (20°C, 100% CaCl ₂)
Solubility in solvents:	No data available
Partition coefficient (n-octanol/water):	N/A
Further Information	Melting point = 772 °C (100% CaCl ₂) Decomposition Temperature > 1600°C (100% CaCl ₂)

10. STABILITY AND REACTIVITY

Conditions to avoid	Keep containers dry and tightly closed to avoid moisture absorption and contamination (hygroscopic)
Materials to avoid:	B ₂ O ₃ + CaO; BrF ₃
Hazardous decomposition products:	N/A.

11. TOXICOLOGICAL INFORMATION

Acute toxicity	LD50/oral/rat = 1000-4000mg/kg
Irritation and corrosion	Skin irritation, eye irritation
Sensitisation	No data available
Subacute, subchronic and prolonged toxicity:	No data available
Human experience	Skin irritation, eye irritation

12. ECOLOGICAL INFORMATION

Ectotoxicity	
Aquatic Toxicity	LC50/96h/Gambusia affinis = 13 400mg/l LC50/96h/Lepomis macrochirus = 10 650mg/l LC50/96h/Daphnia = 649 mg/l LC50/96h/Nitocra spinipes = 1600 mg/l LC50/120h/Nitzschia linearis = 3130 mg/l
Mobility	No data available
Persistence/degradability	
Biological degradability	Stable
Bioaccumulative potential	No data available

13. DISPOSAL

In accordance with local and national regulations.

14. TRANSPORT INFORMATION

Not regulated for transport.

15. REGULATORY INFORMATION

The product is classified and labelled in accordance with EC directives

Hazard symbol(s):	Xi - Irritant
Name on label	Calcium chloride
Risk phrase(s):	R36 – Irritating to eyes
Safety phrase(s):	S22 – Do not breathe dust S24 – Avoid contact with the skin

16. OTHER INFORMATION

Disclaimer

The information contained in this document is intended to describe the product only in terms of health, safety and environmental requirements for the purposes of its safe handling, use and disposal and is to the best of Central Chemical Supplies Limited knowledge and belief correct. Central Chemical Supplies Limited Technical Services will be pleased to give further advice and assistance, but customers must satisfy themselves (by appropriate testing if necessary) that the product is suitable for their purposes and conditions of use and that their facilities and arrangements are suitable for handling or using the product. Accordingly Central Chemical Supplies Limited disclaims any liability for loss, injury or damage which may result from the use of the product, this information or from such advice and assistance save as may be expressly agreed under its terms of sale. This information does not comprise a technical or performance specification for the product and customers are referred to any relevant product technical information or specification issued by Central Chemical Supplies Limited.

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